

CHAPTER 8

Irreversible and Irretrievable Commitment of Resources

8.1 Introduction and Approach

The purpose of this Section is to identify elements of the proposed Project that could result in an irreversible or irretrievable commitment of resources. The discussion includes a description of the Project's long-term benefits and how these benefits offset the irretrievable commitment of resources.

8.1.1 CEQA Statutory Guidance

Section 15126.2(c) of the *CEQA Guidelines* requires a discussion of any significant irreversible environmental changes that would be caused by a proposed Project, including the use of nonrenewable resources. The analysis also examines whether primary or secondary impacts commit future generations to similar types of uses.

8.1.2 Approach

Significance Threshold

For purposes of this section, per Section 15126.2(c) of the *CEQA Guidelines*, a project would result in an irreversible and irretrievable commitment of resources if it:

- Involved a large commitment of nonrenewable resources;
- Created primary and secondary impacts that would generally commit future generations to similar uses;
- Involved uses in which irreversible damage would result from any potential environmental accidents associated with the project; or
- Proposed consumption of resources that were not justified (e.g., the project involves the wasteful use of energy).

Methodology

The significant irreversible impact analysis consists of an evaluation of construction and operation activities and the identification of any nonrenewable resources consumed during these activities. For this evaluation, it has been assumed that the proposed pipeline conveyance system would be operated for 50 years. Groundwater pumped from the aquifer is considered a renewable resource that is naturally recharged on an ongoing basis. Without the Project pumping, this resource would eventually migrate to the brine zone of the Bristol and Cadiz Dry Lakes and be lost to evaporation. Accordingly, implementation of the proposed Project would not result in an irreversible or irretrievable commitment of groundwater resources.

8.2 Analysis of Commitment of Resources

8.2.1 Groundwater Conservation and Recovery Component

Biological Resources

Construction and operational activities would result in direct and indirect loss of habitat. The removal of vegetation and wildlife habitat in the Project area for construction of the wellfields and conveyance system, and the periodic maintenance on the Project components, are all considered an irreversible and irretrievable commitment of these resources. Implementation of mitigation measures would ensure resources are not significantly impacted. Over time the area of temporary effect would recover. Permanent loss of open space would be less than 250 acres. Much of this would be within 50 feet of an existing active railroad. This amount of acreage would not constitute a commitment of significant amount of land in the area.

Cultural Resources

Construction of the Groundwater Conservation and Recovery Component could potentially disturb cultural resources within the Project area. Despite application of mitigation measures to reduce potential impacts to less than significant levels, activities involving data recovery of cultural resources discovered during construction would result in some irreversible losses. Data recovery requires removal of artifacts from their original context. Therefore if data recovery is required due to Project implementation, an irreversible and irretrievable commitment of resources would occur. The Project's effects to cultural resources analyzed in this Draft EIR are less than significant as discussed in Section 4.5.

Geology and Soils

Soil erosion and topsoil loss during and following construction activities of the proposed facilities associated with the Groundwater Conservation and Recovery Component would be mitigated per the implementation of mitigation measures to ensure impacts are less than significant. Nonetheless, some exposed soils would be removed due use of heavy machinery for grading, trenching, well drilling, facilities installation, and other proposed activities. Furthermore,

increases in erosion could result in changes to nearby topography, drainage patterns, and vegetation patterns. Therefore, construction activities would result in irreversible and irretrievable commitment of losses to geology and soil resources. The Project's effects to top soil are less than significant as discussed in Section 4.6.

Land Use and Planning

Installation of the pipeline in the ARZC ROW would permanently commit that portion of the ROW to use as a water utility corridor. Since this easement currently supports a transportation corridor, the addition of a water utility would not inappropriately commit land to a permanent use. Furthermore, the use of property for wells and access roads would permanently remove the land for other uses. However, the low intensity of development in the wellfield would not substantially affect future uses of the properties as a whole. Irreversible affects to land use would be less than significant.

Mineral Resources

Construction of water facilities proposed under the Groundwater Conservation and Recovery Component would involve grading activities that would result in the consumption and loss of sand, gravel, rock and other minerals to fabricate construction materials such as steel and concrete. The extraction of mineral resources for various end uses and purposes, most of them construction and development-related, are considered to be non-renewable resources that will be precluded from future uses. Therefore, construction activities will result an irreversible and irretrievable commitment of losses to mineral resources. However, the use of these materials does not constitute a wasteful use of resources. The use of construction materials is not considered a significant impact.

Public Services and Utilities

Construction and operation of the Groundwater Conservation and Recovery Component would consume fossil fuels, a non-renewable resource to generate energy for vehicles during construction, and to operate pumps for the life of the Project. The use of energy to enhance reliability of water supply is not a wasteful use of irretrievable resources. Developing local water supplies reduces energy required to import water from greater distances. Therefore, the Project is not wasteful and the use of energy is justified.

8.2.2 Imported Water Storage Component

Biological Resources

Construction and operational activities associated with the Imported Water Storage Component will result in direct and indirect loss of habitat. The removal of vegetation and wildlife habitat in the larger Project footprint anticipated for construction of the additional wellfields and conveyance system, and the periodic maintenance on the Project components, are all considered

an irreversible and irretrievable commitment of these resources. Implementation of mitigation measures would ensure resources are not significantly impacted. Given the small acreages affected by the low intensity development, the Project would not be wasteful.

Cultural Resources

Construction of the Imported Water Storage Component could potentially disturb significant cultural resources within the Project area. Despite application of mitigation measures to reduce potential impacts to less than significant levels, activities involving data recovery of cultural resources discovered during construction will result in some irreversible losses. Data recovery will involve some loss because it requires removal of artifacts from their original context. Construction activities will result an irreversible and irretrievable commitment of losses to cultural resources. However, the effects would be justified given the utility of the Project and the limited effects to cultural resources.

Geology and Soils

The expanded wellfield, pump station and spreading basins proposed under the Imported Water Storage Component would increase the potential for soil erosion during construction. Soil erosion and topsoil loss during and following construction activities of proposed facilities associated would be mitigated per the implementation of mitigation measures to ensure impacts are less than significant. Nonetheless, some exposed soils will be removed due use of heavy machinery for grading, trenching, well drilling, facilities installation, and other proposed activities. Therefore, construction activities will result an irreversible and irretrievable commitment of losses to geology and soil resources. However, the effect would not be wasteful and would be justified by the utility of the Project.

Public Services and Utilities

Operation of the proposed facilities associated with the Imported Water Storage Component would consume fossil fuels, a non-renewable resource to generate energy for vehicles during construction, and to operate pumps for the life of the Project. The use of energy to enhance reliability of water supply is not a wasteful use of irretrievable resources. Developing local water supplies may be substituted for water being imported from greater distances and thereby reduces the relative energy required to satisfy the designated beneficial uses. Moreover the Project would provide water in any climatic condition and therefore, Project Participants would not have to diversify their water supply portfolio to the same extent as if they pursued less reliable water. Therefore, the Project is not wasteful and the use of energy is justified.